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TITLE:

Underrun guard for trucks.

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INVENTOR-INFORMATION:

NAME COUNTRY

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INT-CL (IPC): B60R019/56

EUR-CL (EPC): B60R019/38; B60R019/40, B60R019/56

US-CL-CURRENT: 293/102

ABSTRACT:

The invention exhibits a collision device for utility vehicles, especially

lorries, having an upper bumper (1) for collisions with lorries and an underrun

guard (2) arranged below the latter for collisions with cars and to protect

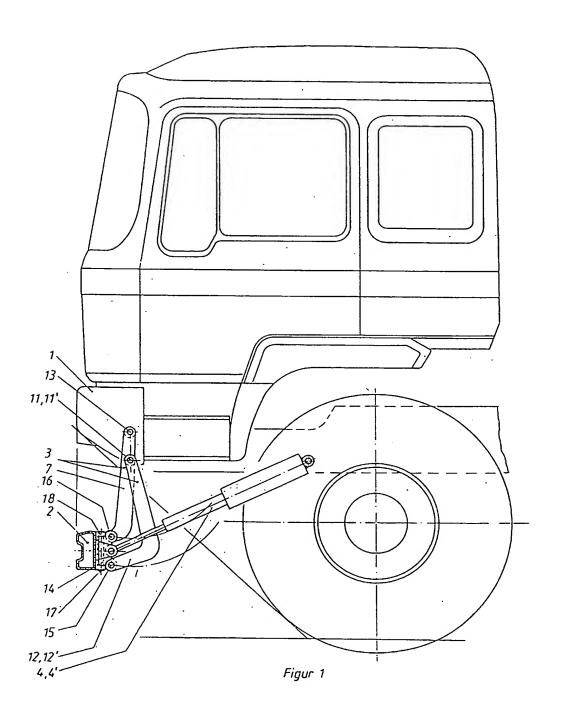
pedestrians, the underrun guard (2) being designed so as to dissipate energy

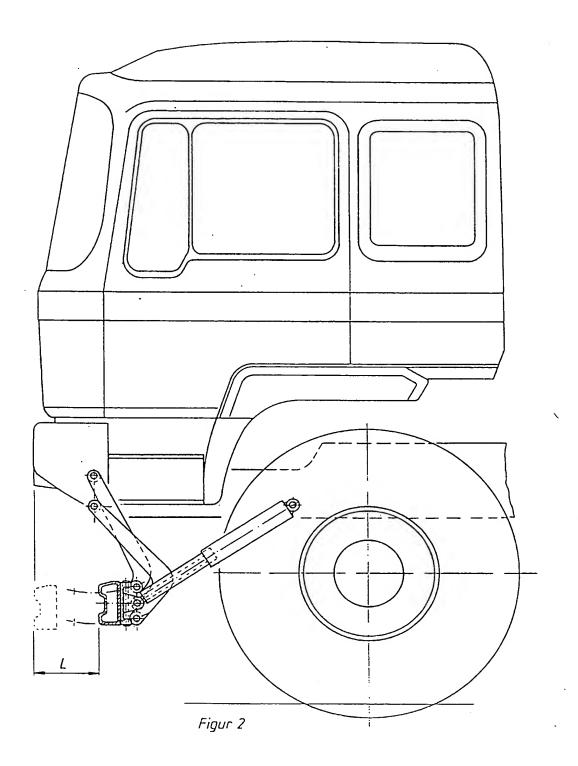
and/or deflect force and to be pivotable into a higher position in the

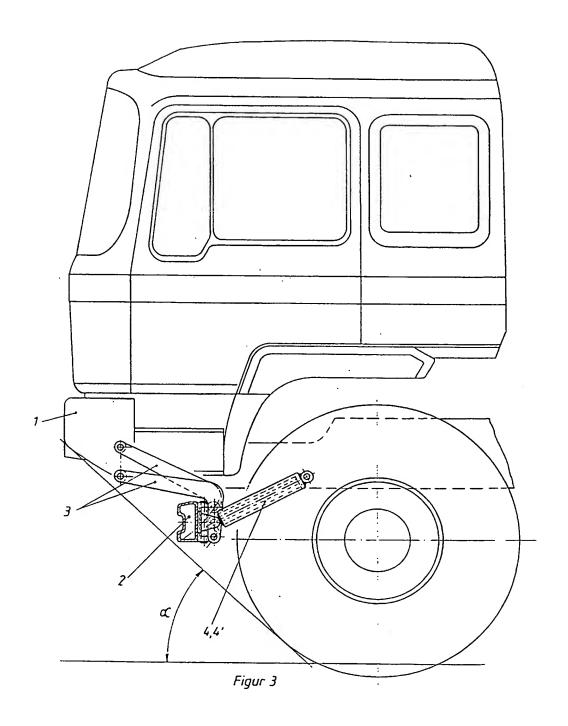
direction of the inside of the vehicle. A 4-bar coupling mechanism

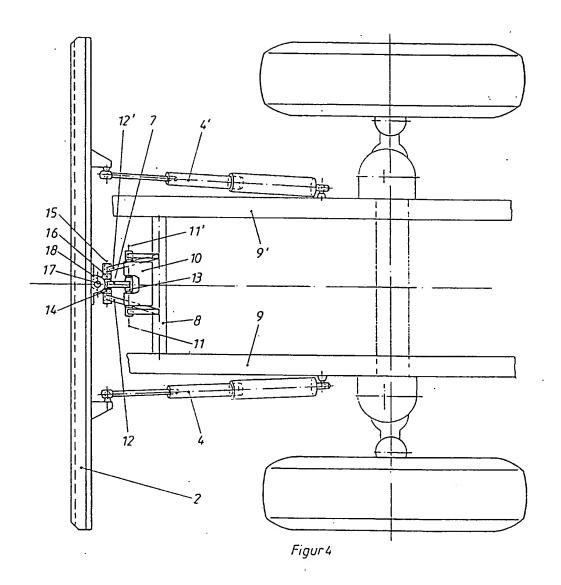
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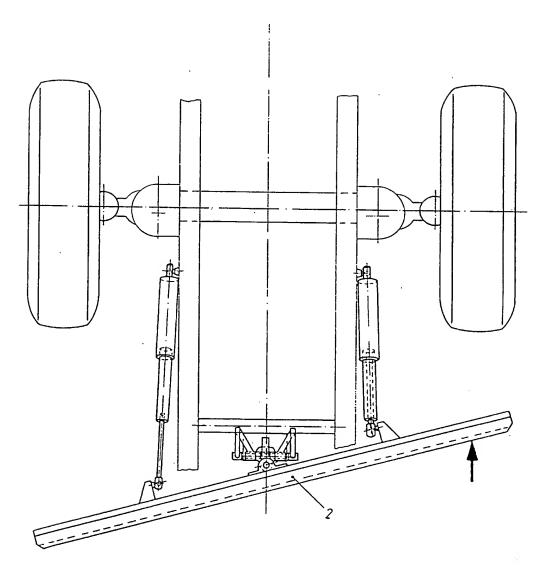
(3) which
does not have the shape of a parallelogram is provided as a vertical
adjustment
mechanism. In the event of a collision, the underrun guard is
guided, while
absorbing the collision energy, over a distance L, which
approximately
corresponds to the collapsible zone of a car, on a virtually
horizontal path
and can subsequently be moved on a short horizontal path into a
higher final
position. <IMAGE>



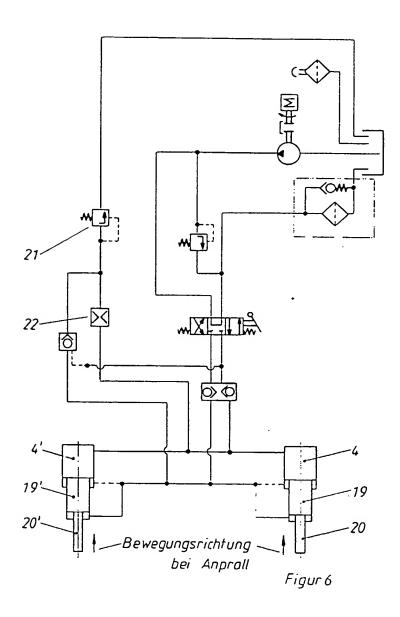


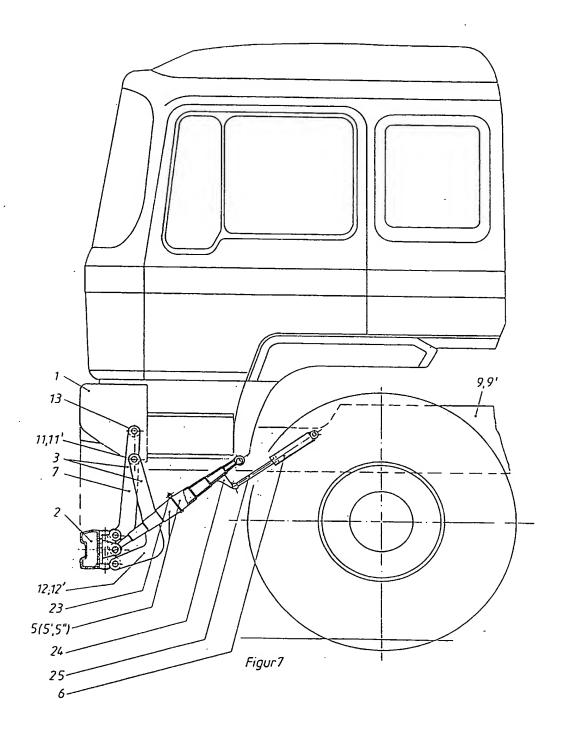


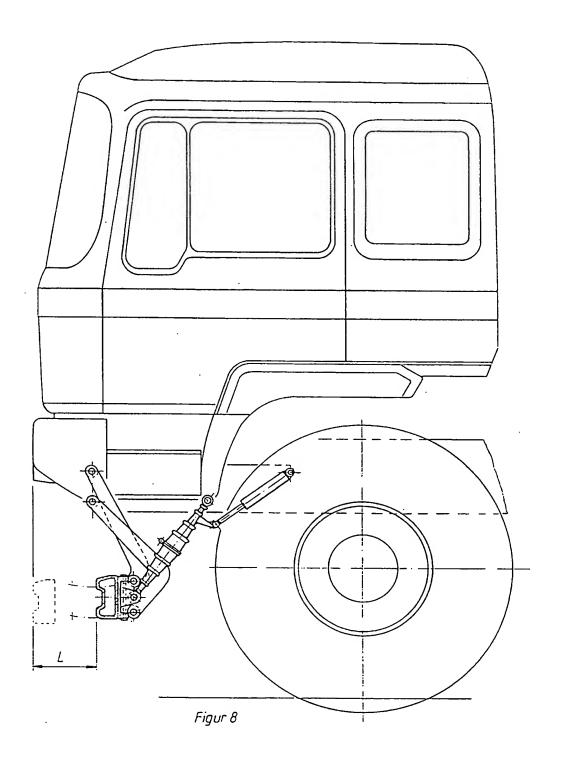


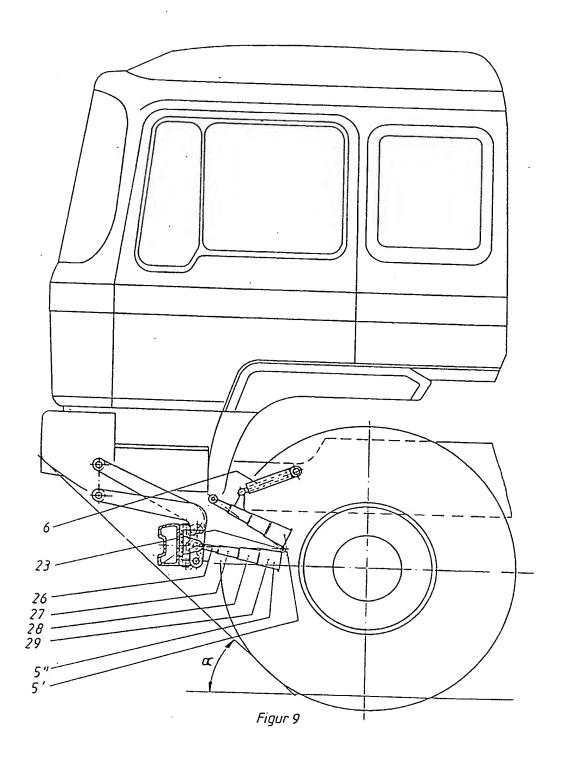


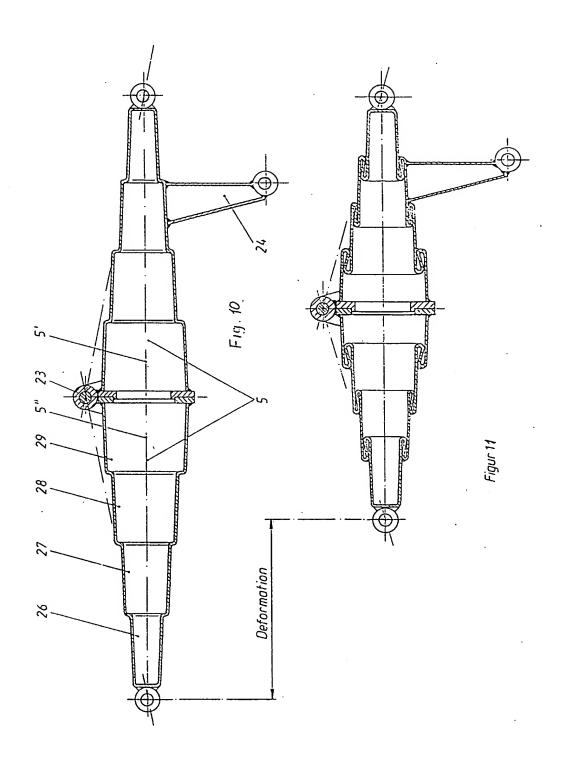
Figur 5











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Y	GB - A - 2 090 (METALAIR) * Fig. 1 *	204		1	B 60 R 19/56
D,Y	<u>DE - A - 2 84</u> (DAIMLER-BENZ) * Fig. 1 *	3 670		1,2	
Y	<u>DE - A - 1 931</u> (TOKYO SHARYO) * Fig. 4 *	844		2	
A	<u>DE - A - 2 438</u> (ROAD RESEARCH * Fig. 1,2,)		1	
A	<u>US - A - 4 105</u> (VIALL) * Fig. 1,3			1	
D,A	DE - A - 3 808 (MAN) * Fig. 3 *	813		1	RECHERCHIERTE SACHGEBIETE (Ind. CI ")
D,A	DE - A - 3 808 (MAN) * Fig. 5 *	 812		1	B 60 R
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